

4.1 Introduction

The goal of this task was to develop optimum signal timings and progression alternates for each of the six study corridors illustrated in Figure 2. This included the evaluation of the existing signal timing plans in order to make recommendations for improvements to the cycle lengths, phase sequences, and phase splits to improve mobility through the corridors.

In order to provide efficient signal timing coordination, it is important, at times, to include intersections that are not part of the corridor but are adjacent to the study corridor(s). A focus area analysis was conducted prior to the initiation of the signal timing task. The purpose of the focus area analysis was to identify intersections that are not along the study corridors but are in close enough proximity to them, that they impact, or are impacted by, traffic and signal operations along a corridor. The criteria developed for the focus area analysis, described in the “Focus Area Analysis Report”, January 2000, included:

- Traffic flow characteristics,
- Proximity of intersections to each other,
- System-wide coordination considerations, and
- Sub-system analysis.

Utilizing the above criteria, it was determined that Pioneers Boulevard between Nebraska Highway 2 and 56th Street should be included in the Nebraska Highway 2 corridor analysis, resulting in the sixth corridor. The inclusion of Pioneers Boulevard into the analysis would evaluate, and provide recommendations for, the merging of westbound vehicles from Pioneers Boulevard onto Highway 2 in a safe and efficient manner. The intersections of 56th Street/Old Cheney Road, 48th Street/Old Cheney and 27th Street/Woods Boulevard were also included in the analysis of the Nebraska Highway 2 corridor.

Table 22 lists the six corridors studied and their corresponding boundaries.